Decoding 16 Probes

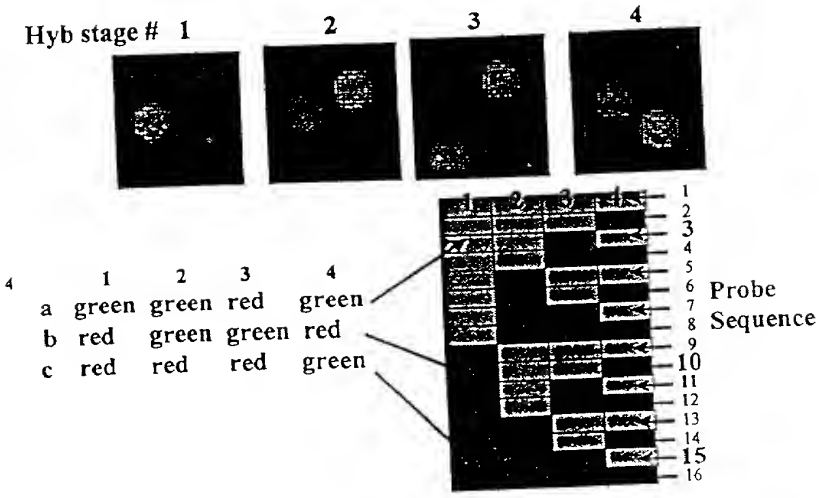


Figure 1

128 bead types
(4013 beads
total)

Four dyes
(Bod493,
BodR6G,
Bod564,
BodTXR)

Four Stages

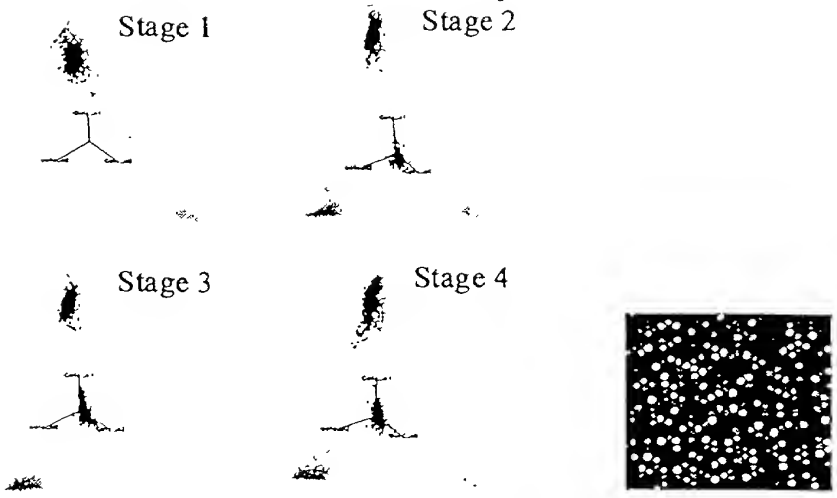


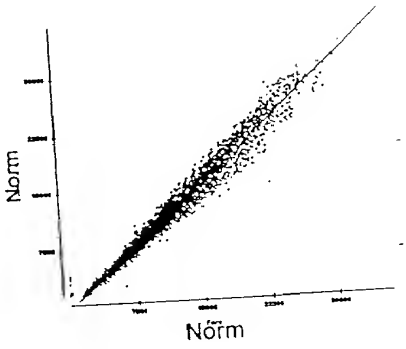
Figure 2

GreyScale Decoding

A.

Code	S1	S2	S3
1	100	100	100
2	100	100	40
3	100	100	10
4	100	40	100
5	100	40	40
6	100	40	10
7	100	10	100
8	100	10	40
9	100	10	10
10	40	100	100
11	40	100	40
12	40	100	10
13	40	40	100
14	40	40	40
15	40	40	10
16	40	10	100
17	40	10	40
18	40	10	10
19	10	100	100
20	10	100	40
21	10	100	10
22	10	40	100
23	10	40	40
24	10	40	10
25	10	10	100
26	10	10	40
27	10	10	10

B



C

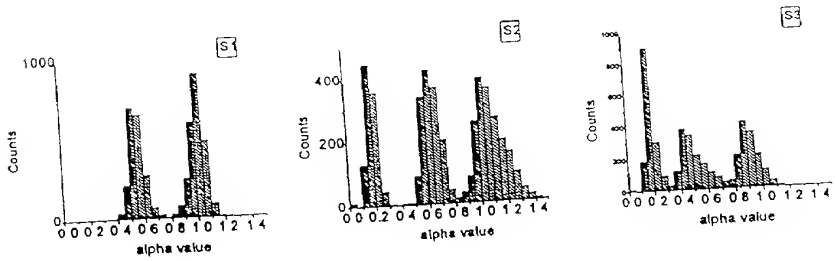


Figure 3

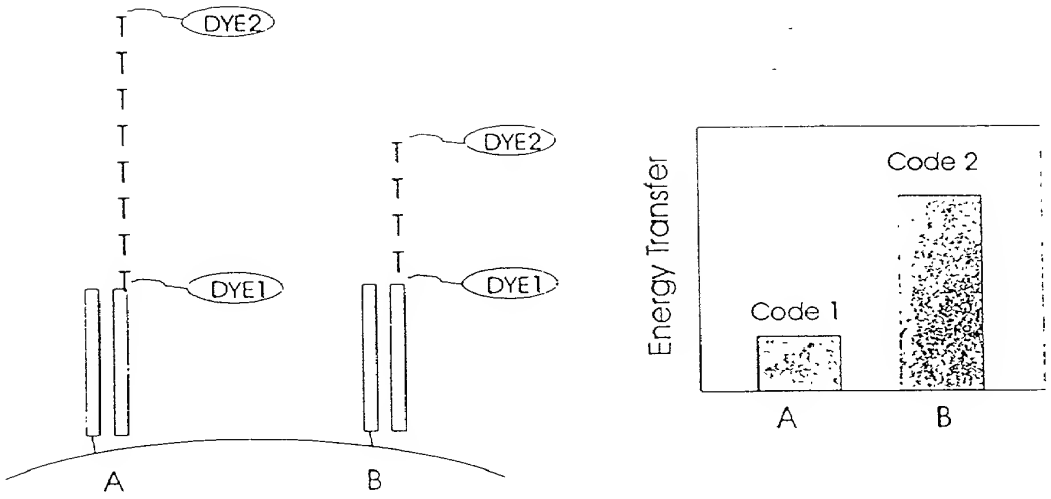


Figure 4

002227 "5028A260

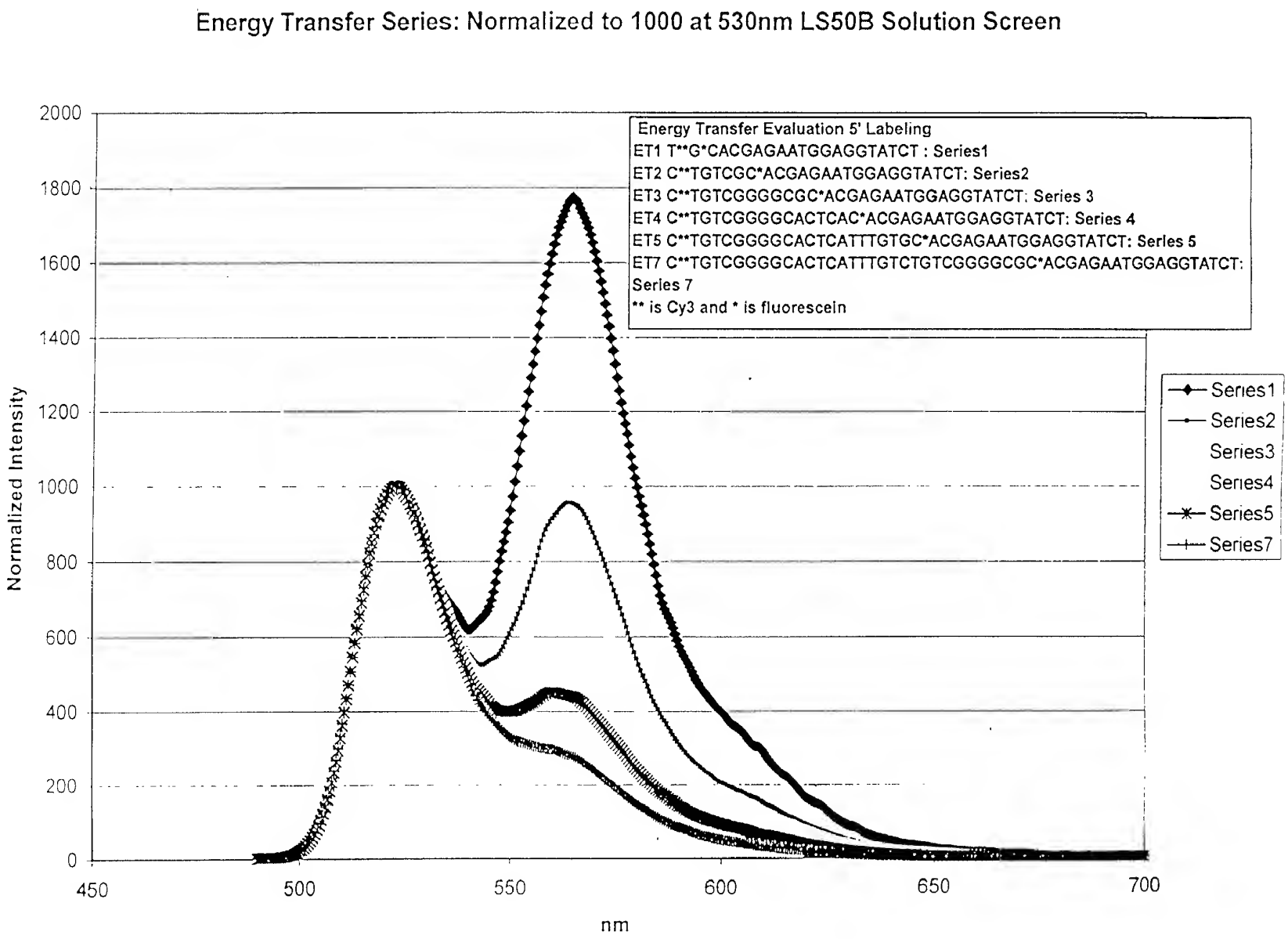


Figure 5

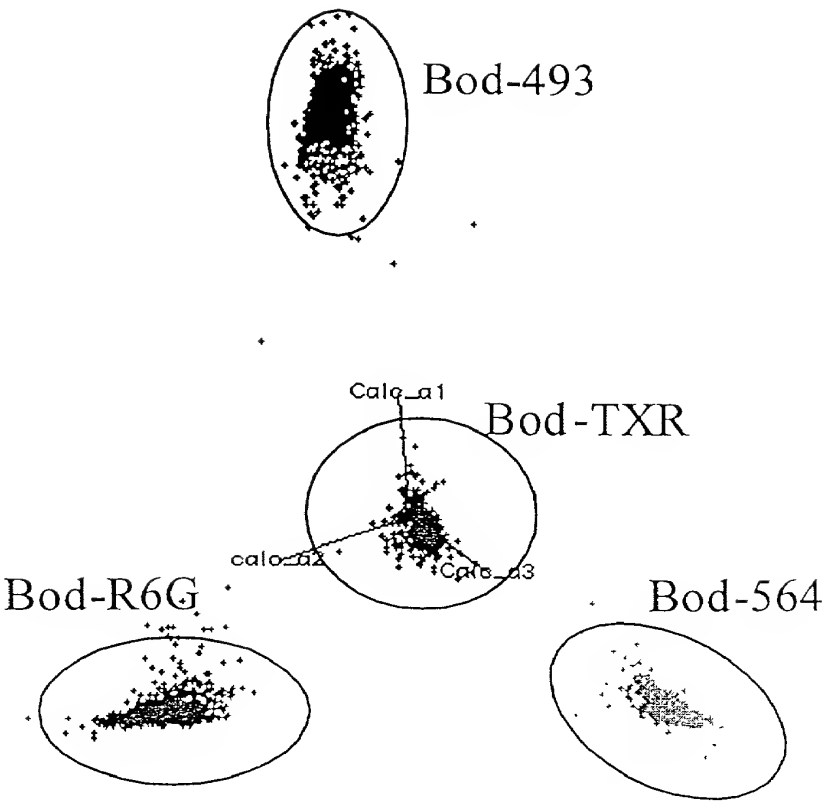
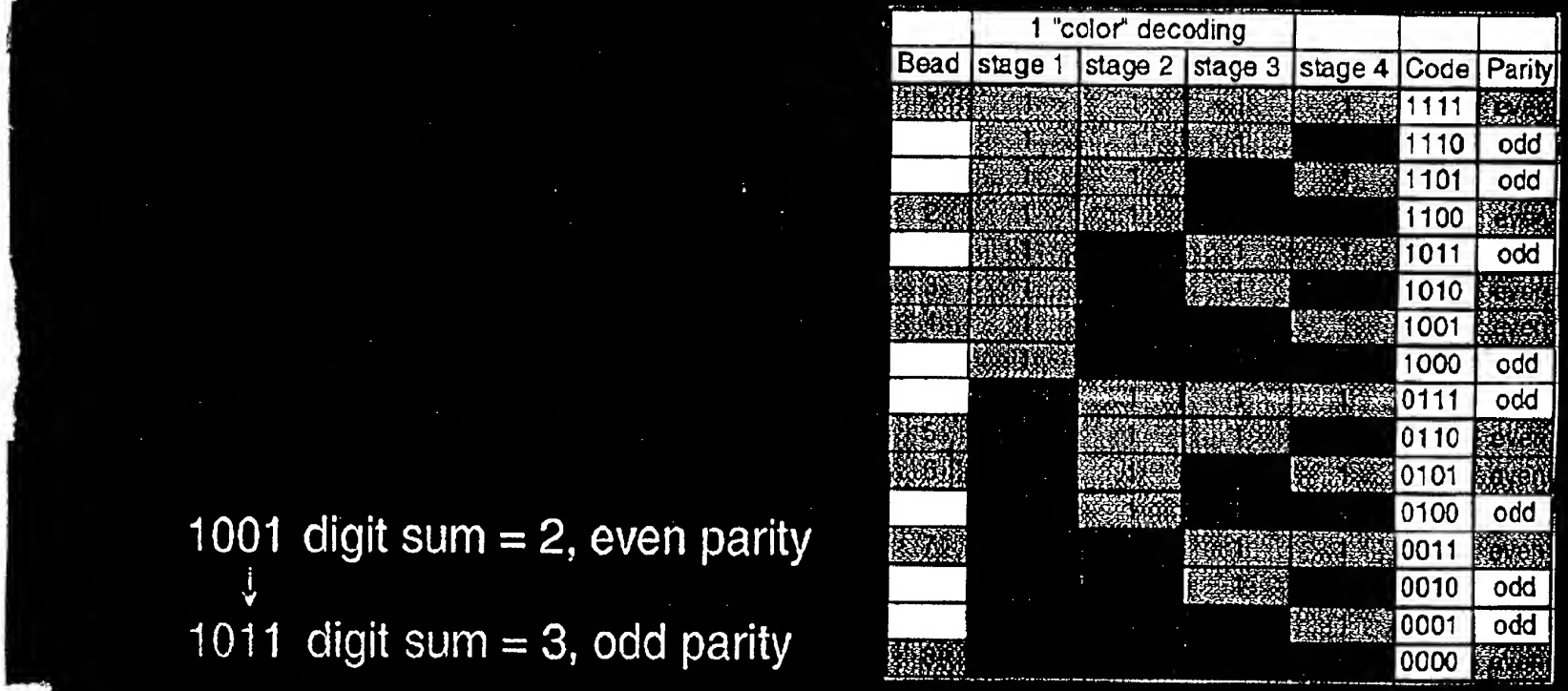


Figure 6

Figure 7



	1 "color" decoding					
Bead	stage 1	stage 2	stage 3	stage 4	Code	Parity
					1111	even
					1110	odd
					1101	odd
					1100	even
					1011	odd
					1010	even
					1001	even
					1000	odd
					0111	odd
					0110	even
					0101	even
					0100	odd
					0011	even
					0010	odd
					0001	odd
					0000	even

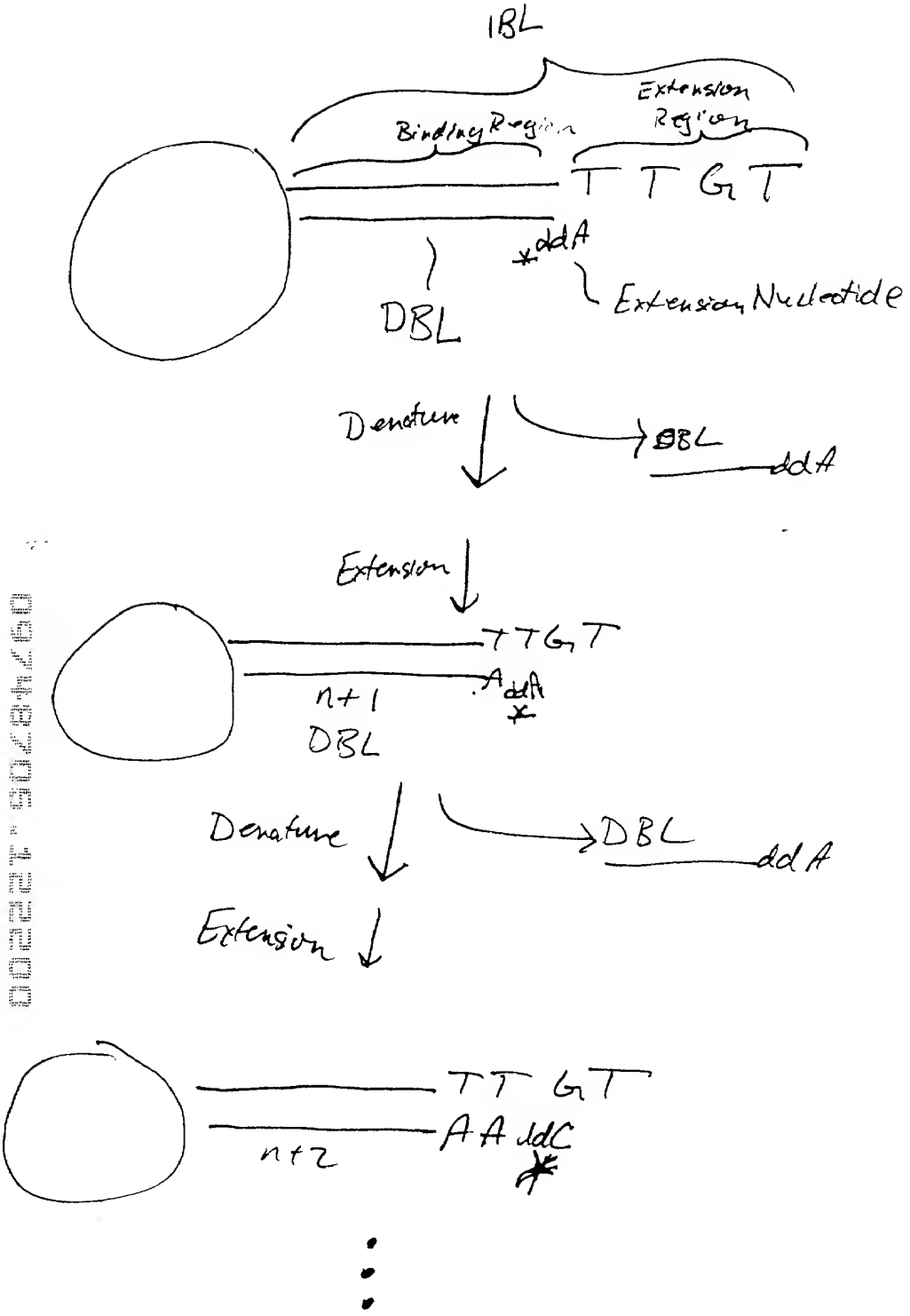

IBL
Extension Region
Binding Region
T T G T
*ddA
Extension Nucleotide
DBL
Denature
DBL
ddA
Extension
T T G T
A ddA
n+1
DBL
Denature
DBL
ddA
Extension
T T G T
A A ddC
n+2

Fig. 8

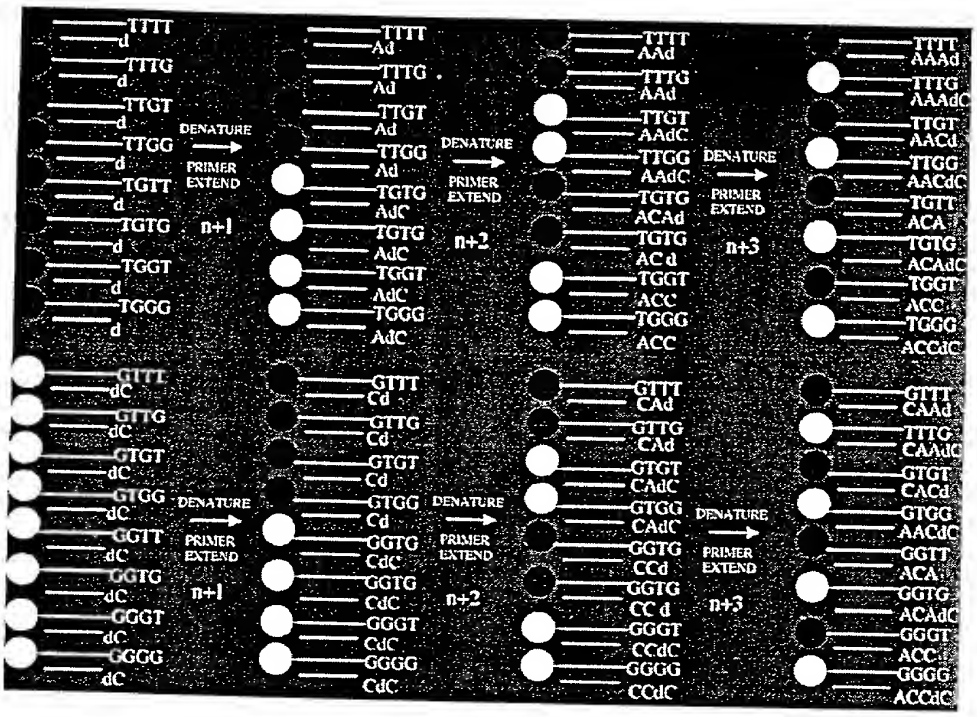


Figure 9

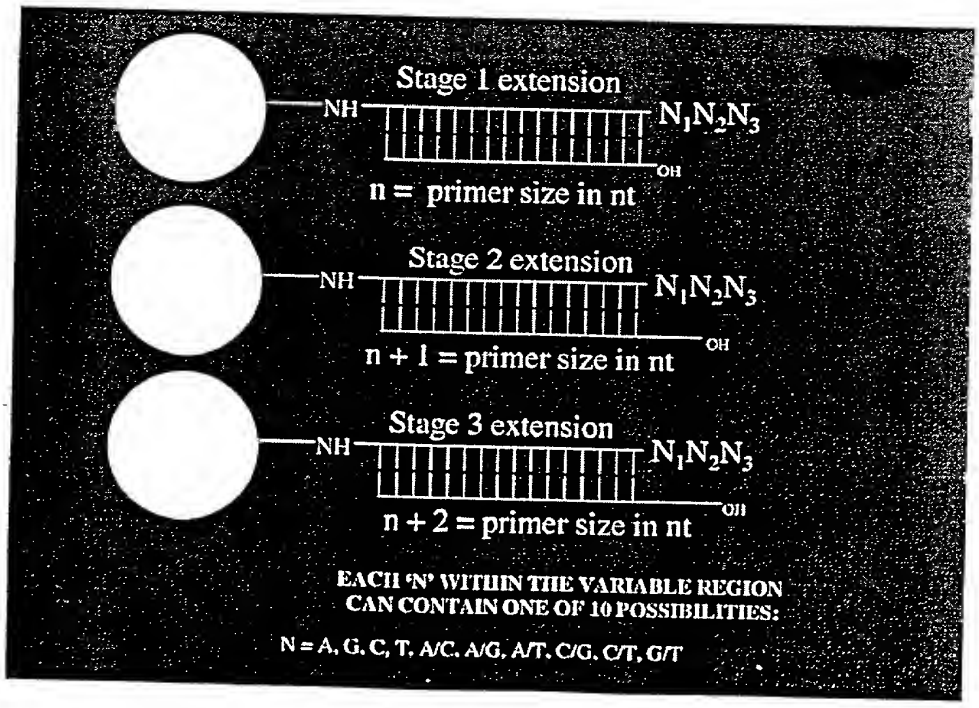


Figure 10

09/529,269

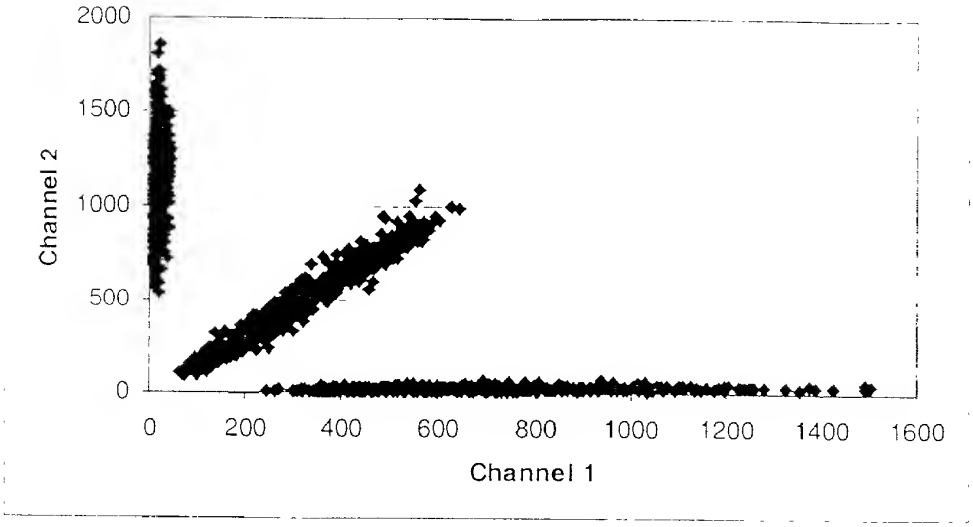

2000
1500
1000
500
0
Channel 2
0
200
400
600
800
1000
1200
1400
1600
Channel 1

Figure 11